

Amendments to claims

This listing of claims will replace all prior versions and listing of claims in the application.

Please amend claims 1-24 as shown.

1. (currently amended): A method for removing a pathogen pathogens from a pharmaceutically active molecule present in biological liquids, ~~said biological liquids containing at least one pharmaceutically active molecule, said method comprising~~ comprising ~~comprising~~ the steps of:

providing a biological liquid, ~~whereby pathogens are potentially present,~~ comprising at least one pharmaceutically active molecule and at least one pathogen in an apparatus, said apparatus comprising an anode, ~~anode and~~ a cathode and a membrane-containing ~~membrane-based~~ separation means suitable for separating said at least one pathogen pathogens from said at least one pharmaceutically active molecule ~~in a liquid, said~~ membrane-containing separation means being positioned between said anode and said cathode;

applying current between said anode and said cathode, thereby causing ~~one of~~ said at least one pathogen pathogens or said at least one pharmaceutically active molecule ~~molecules~~ to pass through said separation means, wherein substantially all transmembrane migration of ~~the~~ said at least one pathogen or said at least one pharmaceutically active molecule is initiated by the application of said current; and

removing ~~and recovering~~ said at least one pharmaceutically active molecule in liquid form and ~~being~~ essentially free from said at least one pathogen pathogens.

2. (currently amended): The method according to claim 1 wherein ~~whereby~~ said membrane-containing separation means is a membrane filtration means.

3. (currently amended): The method according to claim 2 wherein ~~whereby~~ said membrane filtration means is an ultrafiltration membrane.

4. (currently amended): The method according to claim 2 wherein ~~whereby~~ said membrane filtration means is a nanofiltration membrane.

5. (currently amended): The method according to claim 1 wherein whereby said at least one pharmaceutically active molecule is a protein.

6. (currently amended): The method according to claim 5 wherein whereby said protein is a blood protein.

7. (currently amended): The method according to claim 5 wherein whereby said protein is smaller than said at least one pathogen such that and said protein is able to pass through said membrane-containing separation means but ~~allows passing of said protein but prevents passing of said~~ pathogen is not able to pass through said membrane-containing separation means.

8. (currently amended): The method according to claim 1 wherein whereby said membrane-containing separation means is a series of membrane filters with different separation characteristics.

9. (currently amended): The method according to claim 8 wherein whereby said different separation filter characteristics are caused by different cut-off values of the membrane filters in said series of membrane filters.

10. (currently amended): The method according to claim 1 wherein whereby said at least one pathogen is ~~pathogens are~~ selected from the group consisting of viruses, bacteria, prions ~~prions~~, and combinations thereof.

11. (currently amended): The method according to claim 9 wherein whereby said cut-off values are selected to allow a separation between said at least one pharmaceutically active molecule and aggregates ~~aggregate~~ of said molecule.

12. (currently amended): An apparatus for removing pathogens from pharmaceutically active molecules present in biological fluids, ~~said biological fluids containing at least one pharmaceutically active molecule, said apparatus~~ comprising:

a container for uptake of a ~~said~~ biological fluid, said biological fluid comprising at least one pharmaceutically active molecule and at least one pathogen;

an anode, a ~~cathode~~ cathode, and a membrane-containing ~~membrane-based~~ separation means suitable for separating said at least one pathogen ~~pathogens~~ from said at least one pharmaceutically active molecule, said membrane-containing separation means being positioned between said anode and said cathode;

means for removing either said at least one a pathogen or said at least one a pharmaceutically active molecule having passed through said the separation means ~~in a liquid form~~; and

a current supply and means for applying said current between said anode and said cathode, wherein substantially all transmembrane migration of the said at least one pathogen or said at least one pharmaceutically active molecule is initiated by the application of said current.

13. (currently amended): A method for removing a pathogen ~~pathogens~~ from a pharmaceutically active molecule present in biological liquids, comprising:

providing a biological liquid, ~~whereby pathogens are potentially present~~, comprising at least one pharmaceutically active molecule and at least one pathogen in an apparatus, said apparatus comprising an anode, ~~anode~~ and a cathode and a membrane-containing ~~membrane-based~~ separation means suitable for separating said at least one pathogen ~~pathogens~~ from said at least one a pharmaceutically active molecule, the said membrane-containing separation means being positioned between the said anode and the said cathode;

applying current between the said anode and said cathode, thereby causing ~~one of the~~ said at least one pathogen ~~pathogens~~ or the said at least one pharmaceutically active molecule ~~molecules~~ to pass through the said separation means, the said separation means containing a selective membrane that allows passage of either a said at least one pathogen or a said at least one pharmaceutically active molecule through the membrane, while preventing the other from entering therethrough, wherein substantially all transmembrane migration of the said at least one pathogen or said at least one pharmaceutically active molecule is initiated by the application of said current;

optionally, periodically stopping and reversing the said current; and

removing ~~and recovering the~~ said at least one pharmaceutically active molecule in liquid form and ~~being essentially free of~~ from said at least one pathogen ~~pathogens~~.

14. (currently amended): The method according to claim 13 ~~wherein~~ whereby said the membrane-containing separation means is a membrane filtration means.

15. (currently amended): The method according to claim 14 wherein whereby said the membrane filtration means is an ultrafiltration membrane.

16. (currently amended): The method according to claim 14 wherein whereby said the membrane filtration means is a nanofiltration membrane.

17. (currently amended): The method according to claim 14 wherein whereby the said at least one pharmaceutically active molecule is a protein.

18. (currently amended): The method according to claim 17 wherein whereby the said protein is a blood protein.

19. (currently amended): The method according to claim 17 wherein whereby the said protein is smaller than the said at least one pathogen such that and the said protein is able to pass through said membrane-containing separation means but ~~allows passing of said protein but prevents passing of the~~ said pathogen is not able to pass through said membrane-containing separation means.

20. (currently amended): The method according to claim 13 wherein whereby the said membrane-containing separation means is a series of membrane filters with different separation characteristics.

21. (currently amended): The method according to claim 20 wherein whereby the said different separation filter characteristics are caused by different cut-off values of the membrane filters in the said series of membrane filters.

22. (currently amended): The method according to claim 13 wherein whereby the said at least one pathogen is ~~pathogens are~~ selected from the group consisting of viruses, bacteria, prions ~~prions~~, and combinations thereof.

23. (currently amended): The method according to claim 21 wherein whereby the said cut-off values are selected to allow a separation between the said at least one pharmaceutically active molecule and aggregates ~~aggregate~~ of the said molecule.

24. (currently amended): An apparatus for removing pathogens from pharmaceutically active molecules present in biological fluids, ~~the biological fluids containing at least one pharmaceutically active molecule, the apparatus comprising:~~

a container for uptake of ~~a~~ the biological fluid, said biological fluid comprising at least one pharmaceutically active molecule and at least one pathogen;

an anode, a cathode ~~cathode~~, and a membrane-containing ~~membrane-based~~ separation means suitable for separating the said at least one pathogen pathogen from the said at least one pharmaceutically active molecule, ~~the~~ said membrane-containing separation means containing a selective membrane that allows passage of either a said at least one pathogen or a said at least one pharmaceutically active molecule through the said membrane, while preventing the other from entering therethrough, and being positioned between the said anode and the said cathode;

means for removing either said at least one a pathogen or said at least one a pharmaceutically active molecule having passed through the said membrane ~~in a liquid form~~; and

a current supply and means for applying said current between the said anode and the said cathode, wherein substantially all transmembrane migration of the said at least one pathogen or said at least one pharmaceutically active molecule is initiated by the application of said current.